

# Claims

[c1] What is claimed is:

1. An image transmission system of a rear projection television, comprising:

a main board module, having a CPU unit and a signal scaling unit, wherein the CPU unit controls the signal scaling unit to process image signals that are received; and

an optical engine module, connected to the main board module to receive image data from the main board module, wherein the optical engine includes a CPU module and at least one light valve unit, the CPU unit controlling the operation of the light valve unit.

[c2] 2. The system of claim 1, wherein the CPU unit of the main board module transmits control signals to the CPU unit of the main board module.

[c3] 3. The system of claim 1, wherein the main board module and the optical engine module respectively have an analog-interface connecting port.

[c4] 4. The system of claim 1, wherein the main board module and the optical engine module respectively have a

digital-interface connecting port.

- [c5] 5. The system of claim 1, wherein the main board module and the optical engine module respectively have a DVI signal connecting port.
- [c6] 6. The system of claim 1, wherein the main board module and the optical engine module respectively have a VGA signal connecting port.
- [c7] 7. The system of claim 1, wherein the main board module connects to an input device, and the CPU unit of the main board module controls different operation modes of the main board module according to signals from the input device.
- [c8] 8. The system of claim 1, wherein the optical engine module connects to an input device, and the CPU unit of the optical engine module controls different operational modes of the optical engine module according to signals from the input device.
- [c9] 9. The system of claim 1, wherein the light valve unit includes a light valve and a light valve driver, the light valve driver transforms the image data into a format acceptable by the light valve and then transmits the image data to the light valve.

- [c10] 10. The system of claim 1, wherein the optical engine module further includes an image-receiving unit connected to the light valve unit to receive the image data.
- [c11] 11. The system of claim 10, wherein the main board module further includes an image-transforming unit to transform the image signals into a format acceptable by the image-receiving unit of the optical engine module.
- [c12] 12. The system of claim 1, wherein the optical engine module further comprising:  
an illumination unit, emitting beams into the light valve unit; and  
a projecting lens, projecting the beams from the light valve unit to generate image pictures onto a screen.
- [c13] 13. The system of claim 1, wherein the main board module further comprises an image signal transforming and an image-receiving unit connected to the signal-scaling unit for receiving the image signals.
- [c14] 14. An optical engine module, comprising:  
a CPU unit; and  
at least an optical valve unit connected to the CPU unit by which the operation of the optical engine unit is controlled.
- [c15] 15. The optical engine module of claim 14, wherein the

optical engine module has an analog-interface connecting port.

[c16] 16. The optical engine module of claim 14, wherein the optical engine module has a digital-interface connecting port.

[c17] 17. The optical engine module of claim 14, wherein the optical engine module has a DVI signal connecting port.

[c18] 18. The optical engine module of claim 14, wherein the optical engine module has a VGA signal connecting port.

[c19] 19. The optical engine module of claim 14, wherein the optical engine module connects to an input device, and the CPU unit of the optical engine module controls different operation modes of the optical engine module according to signals from the input device.

[c20] 20. The optical engine module of claim 14, wherein the light valve unit includes a light valve and a light valve driver, the light valve driver transforms the image data into a format acceptable by the light valve and then transmits the image data to the light valve.

[c21] 21. The optical engine module of claim 14, wherein the optical engine module further includes an image-receiving unit connected to the light valve unit to receive

the image data.

- [c22] 22. The optical engine module of claim 14, wherein the optical engine module further comprises an illumination unit, emitting beams into the light valve unit, and a projecting lens, projecting the beams from the light valve unit to generate image pictures onto a screen.